Before the
Federal Communications Commission
Washington DC 20554

In the Matter of	)	
	)	
Inquiry Regarding Carrier Current Systems, Including Broadband over Power Line Systems	)	ET Docket No. 03-104

COMMENTS OF CINERGY CORP.

Pursuant to Section 1.430 of the Federal Communications Commission Rules, Cinergy Corp. (Cinergy) files these comments in response to the Commission's *Notice of Inquiry* released April 28, 2003, on broadband over power lines (BPL).[1] Cinergy provides these comments in support of BPL technology deployment by utility companies.

Cinergy is a Public Utility Holding Company and the parent corporation of The Cincinnati Gas & Electric Company, operating in Ohio, and PSI Energy, Inc., operating in Indiana. Cinergy also serves gas and electric utility customers in Kentucky through its subsidiary, The Union Light, Heat and Power Company. Together, Cinergy's operating utilities serve approximately 1.4 million electric, and 455,000 gas customers in Ohio, Kentucky, and Indiana.

A. Experience with BPL

Cinergy is conducting ongoing trials of Access BPL in conjunction with Current Technologies, LLC, of Germantown, Maryland. These trials include the operation of low-voltage and medium-voltage integrated systems in Cincinnati, Ohio. Current Technologies is

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[1] *Inquiry Regarding Carrier Current Systems, Including Broadband over Power Line Systems,* ET Docket No. 03-104, FCC 03-100 (released April 28, 2003) (BPL NOI).

operating its BPL equipment at dozens of Cinergy's transformer locations, enabling over 400 homes, and serving more than 100 households, with BPL broadband access. High-speed Internet access in the trials achieves speeds over 2 megabits/second (four times the speed of DSL). In addition, we plan to use the BPL communications channels in support of utility functions, as discussed below.

The trials are evaluating the integration of power-line and communications technologies. Utility personnel must carry out installations on the power line in full compliance with safety procedures. In collaboration with Cinergy's technical staff, Current Technologies has successfully developed its communications devices such that they are compatible with utility equipment and procedures. This is an under-appreciated but critical step in safe, practical BPL implementation. Cinergy strongly concurs with the Commission's oft-stated conclusion that "competition, not regulation, holds the key to stimulating further deployment of advanced telecommunications capability" and suggests that the market place provides the best forum to foster the continued cooperation and technical compatibility necessary to successfully develop BPL.[2]

B. Benefits of BPL

Cinergy sees two main benefits to BPL. First, it has the potential to deliver broadband anywhere that power lines go, which is almost everywhere that people live and work. Second, in areas where other forms of broadband are available, BPL can provide additional, facilities-based competition that will foster innovation, better service and competitive pricing. Cinergy agrees

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[2] *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Second Report*, 15 FCC Rcd 20913 at ¶ 246 (2000).

with the Commission that the ubiquitous availability of broadband services will "bring valuable new services to consumers, stimulate economic activity, improve national productivity, and advance economic opportunity for the American public."[3] Much as electrification was key to creating economic opportunity early in the twentieth century, in the twenty-first century it is broadband that will lead the way to enhanced educational opportunities, job creation, and economic growth. Yet today broadband access, via cable and DSL, is limited to more densely populated areas. BPL has the potential to bring broadband to everyone.

Where broadband is already available, BPL will stimulate competition with attendant benefits that the Commission has consistently recognized: We believe that by promoting the development and deployment of multiple platforms, competition in the provision of broadband capabilities can thrive, and thereby ensure that the needs and demands of the consuming public are met.[4] Further, the addition of BPL facilities-based technologies will, as correctly recognized by the Commission, enhance homeland security by "creating new facilities to provide redundancy."[5]

In addition, modern utilities, including Cinergy, depend on sophisticated communications systems to provide efficient and reliable utility service. As the NOI found, BPL may have the capability to economically transform the electricity distribution grid into an intelligent network

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3 *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities,* 17 FCC Rcd 3019 at ¶ 1 (2002).

4 *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities,* 17 FCC Rcd 3019 at ¶ 4 (released Feb. 15, 2002) (footnote omitted).

5 *BPL NOI* at ¶ 9.

all the way to each customer's residence.[6] This would extend the reach of utility supervisory control and data acquisition (SCADA) systems beyond their present limitations and result in increased system reliability and improved customer service. The enhanced power distribution services that BPL may potentially permit include:

- *automated meter reading*, which enables time-of-day billing and hence lower energy costs for off-peak use;
- automated *outage detection*, which otherwise must rely to a large extent on customers phoning in;
- *load management*, to minimize costs and maintain reliable service in the face of customers' changing energy needs
- *power quality monitoring* to detect faulty components before they fail; and
- *substation monitoring* for maximum reliability.

Using BPL systems for load profiling and control, time-of-use electricity control, remote control of major loads, and outage detection offer potential benefits not currently available to utilities in an economically feasible form.

While still in the early stages of development and planning, such applications may directly contribute to the public interest by forestalling the need to construct costly new power generation plants, and allow utilities to more reliably protect critical national infrastructure.

Conclusion:

Cinergy respectfully requests that the Commission refrain from regulating the nascent BPL industry in ways that might threaten its early survival. Cinergy strongly supports the Commission's longstanding conclusions that market forces best promote the development and deployment of broadband technologies. Similarly, market forces can best resolve technical

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[6] *BPL NOI* at ¶¶ 9, 28.

issues. At this very early stage in the BPL technology life cycle, it would be premature for the Commission to freeze particular solutions in place through regulation - indeed, at this time, it is impossible even to know what problems, if any, may arise that might necessitate regulatory intervention.[7] Each utility and BPL provider should be permitted to explore commercial and technical arrangements that they believe will be efficient and will protect both utility systems and the consumers they seek to serve. Any attempt to impose regulatory constraints on the nascent technology of BPL will only increase the cost associated with that technology, hinder innovation, and delay the public benefits that represents the potential of BPL.

Respectfully submitted,

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[7] "The Commission has shown regulatory restraint with respect to emerging services in a number of contexts." *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, *Notice of Inquiry,* GN Docket No. 00-185, FCC 00-355 at ¶ 11 (released September 28, 2000).

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